

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/507,500
Source: PCT
Date Processed by STIC: 3-25-05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 03/25/2005

PATENT APPLICATION: US/10/527,500

TIME: 11:11:04

Input Set : A:\66903-02 sequence listing.txt

Output Set: N:\CRF4\03252005\J527500.raw

3 <110> APPLICANT: THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS
 4 REPRESENTED BY THE SECRETARY OF THE DEPARTMENT OF HEALTH AND
 5 HUMAN SERVICES
 6 Valenzuela, Jesus G.
 7 Ribeiro, Jose M.C.
 8 Kamhawi, Shaden
 9 Belkaid, Yasmine
 10 Fischer, Laurent Bernard
 11 Audonnet, Jean-Cristophe
 12 Milward, Francis William
 14 <120> TITLE OF INVENTION: P. ARIASI POLYPEPTIDES AND P. PERNICIOSUS POLYPEPTIDES AND
 15 METHODS OF USE
 17 <130> FILE REFERENCE: 4239-66903-02
 C--> 19 <140> CURRENT APPLICATION NUMBER: US/10/527,500
 C--> 19 <141> CURRENT FILING DATE: 2005-03-11
 19 <150> PRIOR APPLICATION NUMBER: PCT/US2003/029833
 20 <151> PRIOR FILING DATE: 2003-09-18
 22 <150> PRIOR APPLICATION NUMBER: US 60/425,852
 23 <151> PRIOR FILING DATE: 2002-11-12
 25 <150> PRIOR APPLICATION NUMBER: US 60/412,327
 26 <151> PRIOR FILING DATE: 2002-09-19
 28 <160> NUMBER OF SEQ ID NOS: 87
 30 <170> SOFTWARE: PatentIn version 3.2
 32 <210> SEQ ID NO: 1
 33 <211> LENGTH: 446
 34 <212> TYPE: PRT
 35 <213> ORGANISM: Phlebotomus ariasi
 37 <400> SEQUENCE: 1
 39 Met Lys Leu Val Pro Leu Cys Ile Leu Val Cys Phe Leu Ile Ile Ala
 40 1 5 10 15
 43 Gln Gln Val Ala Gln Asn Glu Ala Ser Pro Ala Lys Ser Gln Asp Ala
 44 20 25 30
 47 Met Tyr Gly Asp Trp Ser Arg Trp Ser Ser Cys Asp Glu Thr Cys His
 48 35 40 45
 51 Gln Thr Lys Val Arg Ser Cys Leu Gly Ala Val Cys Glu Arg Asn Arg
 52 50 55 60
 55 Leu Met Lys Glu Arg Lys Cys Pro Gly Cys Gly Thr Lys Val Arg Ile
 56 65 70 75 80
 59 Val Gln Lys Leu Leu Gln Leu Phe Gly Met Gly Asp Ser Ile Glu Thr
 60 85 90 95
 63 Asp Tyr Glu Asp Asp Tyr Gly Glu His Trp Leu Thr Asp Asp Arg Val
 64 100 105 110
 67 Ile Ser Ser Arg Asn Asp Pro Glu Ser Ala Glu Ser Asp Glu Leu Gly

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/527,500

DATE: 03/25/2005
TIME: 11:11:04

Input Set : A:\66903-02 sequence listing.txt
Output Set: N:\CRF4\03252005\J527500.raw

68	115	120	125
71	Ser Phe Phe Arg Asp Phe Phe His Ser Phe Asp Phe Glu Trp Lys Asn		
72	130	135	140
75	Pro Phe Ser Asn Pro His Glu Asn Asn Asp Val Asp Leu Glu Val Glu		
76	145	150	155
79	Glu Asp Glu Glu Val Glu Glu Leu Pro Glu Ile Arg Thr Ser Asn Glu		160
80	165	170	175
83	Glu Asp Ser Val Ser Gly Ala Asp His Val Cys Gly Val Thr Lys Asn		
84	180	185	190
87	Glu Arg Ser Ser Gly Met Met Ala Lys Thr Ile Gly Gly Arg Asn Ser		
88	195	200	205
91	Lys Lys Gly Arg Trp Pro Trp Gln Val Ala Leu Tyr Asn Gln Glu Tyr		
92	210	215	220
95	Glu Asn Phe Phe Cys Gly Gly Thr Leu Ile Ser Lys Tyr Trp Val Ile		
96	225	230	235
99	240		
100	Thr Ala Ala His Cys Leu Ile Ser Asp Phe Gly Ser Asp Ile Thr Ile		
103	245	250	255
104	Phe Ser Gly Leu Tyr Asp Thr Gly Asp Leu Val Glu Ser Pro Tyr Ser		
107	260	265	270
108	Ile His Leu Val Arg Asp Arg Val Ile His Pro Arg Tyr Asp Ala Glu		
111	275	280	285
112	Thr Asn Asp Asn Asp Ile Ala Leu Leu Arg Leu Tyr Asn Glu Val Lys		
115	290	295	300
116	Leu Ser Asp Asp Val Gly Ile Ala Cys Leu Pro Ser Tyr Ser Gln Ala		
119	305	310	315
120	320		
123	Ser Pro Gly Arg Ser Glu Val Cys Lys Val Leu Gly Trp Gly Gln Gly		
124	325	330	335
127	Thr Arg Arg Thr Lys Leu Gln Glu Ala Asp Met His Ile Gln Pro Ala		
128	340	345	350
131	Asn Ser Cys Lys Arg His Tyr Tyr Gly Thr Gly Gln Leu Val Thr Arg		
132	355	360	365
135	His Met Leu Cys Ala Ser Ser Arg Asn Tyr Val Ser Asp Thr Cys Gly		
136	370	375	380
139	Gly Asp Ser Gly Gly Pro Leu Leu Cys Arg Asp Thr Lys Ser Pro Ala		
140	385	390	395
143	Arg Pro Trp Thr Leu Phe Gly Ile Thr Ser Phe Gly Asp Asp Cys Thr		400
144	405	410	415
147	Val Ser Glu Ser Pro Gly Val Tyr Ala Arg Val Ala Ser Phe Arg Lys		
148	420	425	430
151	440	445	
152	<210> SEQ ID NO: 2		
153	<211> LENGTH: 1520		
154	<212> TYPE: DNA		
155	<213> ORGANISM: Phlebotomus ariasi		
156	<400> SEQUENCE: 2		
157	acttgtcgat cactttcac tcgctccaga cgcattttg cgctcttcag ccgtgattag	60	
159	cacaaagtgt ttttagaattt ggtaaaaaaa tagcaagata aggtatggaaat tagtgcatt	120	
161	gtgtatTTTA gtgtgtttc taatcatcgc gcagcagggtg gctcagaatg aagcatctcc	180	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/527,500

DATE: 03/25/2005
TIME: 11:11:04

Input Set : A:\66903-02 sequence listing.txt
Output Set: N:\CRF4\03252005\J527500.raw

163	cgc	aaaaagc	caagacgcca	tgtacggtga	ttggagtcgt	tggagctcct	gtgacgagac	240									
165	ttg	ccatcg	acgaaggta	gatcg	aggggctgtc	tgtgagcgga	atcgactgtat	300									
167	gaagg	agcga	aatgtccag	gatgtggta	aaaagtgcga	attgtacaga	aacttcttca	360									
169	gct	ctcggc	atgggagact	ccatagagac	tgactatgaa	gatgactatg	gagagcactg	420									
171	gct	actgtat	gacagagtca	ttagttctag	aatgtatcct	aaaagtgcag	aaagtgtatg	480									
173	tttggatca	ttcttcagg	atttcttca	ttcattcgat	tttgagtgga	aaaatccatt		540									
175	tagcaatccc	catgagaaca	atgtgtgga	cttggagggtg	gaggaagatg	aggaagtgtga		600									
177	agaacttccc	gaaatttagga	cttcta	atgtgtgga	ggaggattct	gtctctgggg	cgatcacgt	660									
179	gtgtggagt	accaagaatg	agagatctc	agggatgtg	gaaaaacta	tcggcgggag		720									
181	gaactcgaag	aagggtcgat	ggccctggca	agtggctt	tataaccagg	aatatgagaa		780									
183	tttcttctgc	ggcgggactc	ttatctcaa	atactgggtc	ataacggccg	ctca	ctgtct	840									
185	gatatctgac	ttcggcagt	acatcacat	cttctccggc	ctgtacgaca	ccggagatct		900									
187	cgtggagtcg	ccctacagca	tccacctgg	gcgggatcg	gtgattc	atc	cgcgctacg	960									
189	cgccgaaacc	aatgacaatg	atatgc	ctgc	tacaacgaa	tgaaattgag		1020									
191	cgatgatgt	ggtatcg	gtctcccag	ctactcgaa	gcctccccgg	gacgcagt	gt	1080									
193	ggtgtcaag	gtgctgggt	ggggccaagg	gacacgtcg	accaaactcc	aggaggccg		1140									
195	catgcacatc	caacccgca	actcctgca	gcgccactac	tacggcaccg	gacaactcg		1200									
197	cacgcgtc	acatgtgt	cttcc	ctccgg	gaactacgtc	agc	gacacgt	1260									
199	ttccgg	ttccgtt	ccactgctgt	gtcgcgac	caa	atcccccc	gcccgaccct	1320									
201	cgccatc	acgttgcgt	acgattgcac	ggtgagc	gag	agtccgggt	tttatgcgcg	1380									
203	cgtgcctcc	ttccggaa	gtt	gtc	catcg	tg	cgacggct	1440									
205	ttaataaaact	cacaatatta	tcagt	aaaaaa	aataaattag	caa	atttaat	1500									
207	aaaaaaaaaaaa	aaaaaaaaaaaa						1520									
210	<210>	SEQ ID NO:	3														
211	<211>	LENGTH:	251														
212	<212>	TYPE:	PRT														
213	<213>	ORGANISM:	Phlebotomus ariasi														
215	<400>	SEQUENCE:	3														
217	Met	Asn	Ile	Leu	Leu	Lys	Val	Ala	Ile	Leu	Val	Ser	Leu	Cys	Glu	Ile	
218	1									10					15		
221	Gly	Tyr	Ser	Trp	Lys	Tyr	Pro	Arg	Asn	Ala	Asp	Gln	Thr	Leu	Trp	Ala	
222										20					25		30
225	Trp	Arg	Ser	Cys	Gln	Lys	Gly	Asn	Tyr	Asp	Pro	Glu	Leu	Val	Lys	Lys	
226										35					40		45
229	Trp	Met	Ala	Phe	Glu	Ile	Pro	Asp	Asp	Glu	Val	Thr	His	Cys	Tyr	Ile	
230										50					55		60
233	Lys	Cys	Val	Trp	Thr	His	Leu	Gly	Met	Tyr	Asp	Glu	Thr	Ser	Gln	Thr	
234										65					70		75
237	Ile	Arg	Ala	Asp	Arg	Val	Lys	Gln	Gln	Phe	Lys	Ala	Arg	Gly	Leu	Ser	
238										85					90		95
241	Val	Pro	Ala	Glu	Ile	Ser	His	Leu	Glu	Gly	Ser	Thr	Gly	Gly	Ser	Cys	
242										100					105		110
245	Val	Thr	Ile	Tyr	Lys	Lys	Thr	Arg	Ala	Phe	Leu	Glu	Thr	Gln	Met	Pro	
246										115					120		125
249	Asn	Tyr	Arg	Ile	Ala	Phe	Tyr	Gly	Thr	Val	Glu	Glu	Ser	Asp	Lys	Trp	
250										130					135		140
253	Phe	Ala	Asn	Asn	Pro	Glu	Thr	Lys	Pro	Lys	Arg	Ile	Lys	Ile	Ser	Asp	
254										145					150		155
257	Phe	Cys	Lys	Gly	Arg	Glu	Ala	Gly	Thr	Glu	Gly	Thr	Cys	Lys	His	Ala	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/527,500

DATE: 03/25/2005
TIME: 11:11:04

Input Set : A:\66903-02 sequence listing.txt
Output Set: N:\CRF4\03252005\J527500.raw

258	165	170	175
261	Cys Ser Met Tyr Tyr Tyr Arg Leu Val Asp Glu Asn Leu Val Ile		
262	180	185	190
265	Pro Phe Arg Lys Leu Pro Gly Ile Leu Asp Ser Gln Leu Glu Gln Cys		
266	195	200	205
269	Arg Asp Gln Ala Ser Ser Glu Thr Gly Cys Lys Val Gly Asp Thr Ile		
270	210	215	220
273	Tyr Asn Cys Leu Asn Arg Ile Asn Pro Glu Gly Leu Lys Lys Ala Leu		
274	225	230	235
277	Asn Thr Leu Asp Glu Gln Ser Leu Thr Leu Tyr		240
278	245	250	
281	<210> SEQ ID NO: 4		
282	<211> LENGTH: 815		
283	<212> TYPE: DNA		
284	<213> ORGANISM: Phlebotomus ariasi		
286	<400> SEQUENCE: 4		
287	aaaatgaata tcttattgaa agttgcgatt ttggtagact tggcgaaat tggtactct	60	
289	tggaaatatac ccagaatgc cgatcaaact ctctgggctt ggagatcatg ccaaaaggaa	120	
291	aactatgacc cagaattagt gaagaaatgg atggctttg aaatccaga cgacgaagta	180	
293	actcattgtt acattaagtg tggggact cattggaa tgtacatga aactagccaa	240	
295	actattagag ctgatagagt caagcaacaa ttcaaggctc gtggactatc agttcctgct	300	
297	gaaataagcc atttagaggg atctacagga ggatcctgtg taacgattt caaaaaaaact	360	
299	agggtttcc ttgaaactca aatgccaat tatcgcatgg cattctatgg cactgtggaa	420	
301	gaatcagata agtggttcgc gaataatccc gaaactaaac ccaagagaat taagatttct	480	
303	gacttctgca aaggcgcga agctggaaacg gaaggaactt gcaagcatgc ttgcagcatg	540	
305	tactactacc gcttagtcga tgaggataat ctgtgattc ctttcaggaa gttgccagga	600	
307	atcttagatt cccaacttga acaatgcagg gatcaagcta gttcgaaac tggatgcaaa	660	
309	gttgggtata caatctacaa ttgtcttaac agaattaatc cggaaggtct taaaaaaagca	720	
311	ttgaatacac tcgatgaaca atcattgacg ttgtattaga aagcaataaa cttgattaag	780	
313	aaaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa	815	
316	<210> SEQ ID NO: 5		
317	<211> LENGTH: 388		
318	<212> TYPE: PRT		
319	<213> ORGANISM: Phlebotomus ariasi		
321	<400> SEQUENCE: 5		
323	Met Lys Ile Phe Leu Cys Leu Phe Ala Ala Val Ser Ile Gln Gly Ala		
324	1 5 10 15		
327	Leu Ala Ser Gln Ile Glu Arg Glu Tyr Ala Trp Lys Asn Ile Ile Tyr		
328	20 25 30		
331	Glu Gly Ile Asp Gln Gly Ser Tyr Asn Ile Glu Asn Ser Ile Pro Thr		
332	35 40 45		
335	Ala Phe Ala His Asp Ala Ala Ser Lys Lys Ile Phe Ile Thr Ile Pro		
336	50 55 60		
339	Arg Ile Asn Gln Val Pro Ile Thr Leu Thr Glu Phe Asp Ser Ile Lys		
340	65 70 75 80		
343	Tyr Pro Gly Gly Ser Pro Pro Leu Ser Lys Phe Pro Gly Ser Asp Asn		
344	85 90 95		
347	Ile Ile Ser Val Tyr Gln Pro Val Ile Asp Glu Cys Arg Arg Leu Trp		
348	100 105 110		

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/527,500

DATE: 03/25/2005
TIME: 11:11:04

Input Set : A:\66903-02 sequence listing.txt
Output Set: N:\CRF4\03252005\J527500.raw

351 Ile Val Asp Ala Gly Gln Val Glu Tyr Lys Gly Asp Glu Gln Lys Tyr
352 115 120 125
355 Pro Lys Lys Asn Pro Ala Ile Ile Ala Tyr Asp Leu Thr Lys Asp Asn
356 130 135 140
359 Tyr Pro Glu Ile Asp Arg Tyr Glu Ile Pro Ile Asn Ile Ala Gly Asn
360 145 150 155 160
363 Pro Leu Gly Phe Gly Gly Phe Thr Val Asp Val Thr Asn Pro Lys Glu
364 165 170 175
367 Gly Cys Gly Lys Thr Phe Ile Tyr Ile Thr Asn Phe Glu Asp Asn Thr
368 180 185 190
371 Leu Ile Val Tyr Asp Gln Glu Lys Lys Asp Ser Trp Lys Ile Ser His
372 195 200 205
375 Gly Ser Phe Lys Pro Glu His Glu Ser Ile Leu Ile His Asn Gly Val
376 210 215 220
379 Asp His Ile Leu Lys Leu Gly Ile Phe Gly Ile Thr Leu Gly Asp Arg
380 225 230 235 240
383 Asp Ser Glu Gly Asn Arg Pro Ala Tyr Tyr Leu Gly Ser Ser Thr
384 245 250 255
387 Lys Leu Phe Glu Val Asn Thr Lys Ala Leu Lys Lys Glu Gly Glu
388 260 265 270
391 Ile Glu Pro Ile Thr Leu Gly Asp Arg Gly Pro His Ser Glu Ala Ile
392 275 280 285
395 Ala Leu Ala Tyr Asp Pro Lys Thr Lys Val Ile Phe Phe Thr Glu Tyr
396 290 295 300
399 Asn Ser Lys Lys Ile Ser Cys Trp Asn Ile Lys Lys Pro Leu Ile His
400 305 310 315 320
403 Asp Asn Met Asp Lys Ile Tyr Ala Ser Pro Glu Phe Ile Phe Gly Thr
404 325 330 335
407 Asp Ile Ser Val Asp Ser Glu Ser Lys Leu Trp Phe Phe Ser Asn Gly
408 340 345 350
411 His Pro Pro Ile Glu Asn Leu Gln Leu Ser Ser Asp Lys Pro His Ile
412 355 360 365
415 His Leu Ile Ser Val Asp Thr Glu Lys Ala Ile Arg Gly Thr Lys Cys
416 370 375 380
419 Glu Val Lys Ala
420 385
423 <210> SEQ ID NO: 6
424 <211> LENGTH: 1268
425 <212> TYPE: DNA
426 <213> ORGANISM: Phlebotomus ariasi
428 <400> SEQUENCE: 6
429 gtcagtctt tggaaacaaa acatgaagat cttctgtgc cttttgctg cagttccat 60
431 tcagggagct tttagttctc aaattgaaag ggaatacgcg tggaaaaaca ttattttatga 120
433 agggatagat caaggatctt acaacatgtt aaacagcatc ccaactgctt tcgctcacga 180
435 tgcagctgtt aagaagattt tcatcaactat tccaaagaata aaccaagtttccat 240
437 aactgaattt gatagcatca agtatccggg aggttctctt cctcttagca aattccctgg 300
439 aagcgataac ataatttccg tttatcaacc ggtcattgac gaatgtcgta gactttggat 360
441 tgtggacgct ggacaggttg agtacaaggg agatgagcag aagtatccca agaaaaatcc 420
443 tgctatcata gcttatgacc tgactaagga caattatcct gagattgatc gatacgagat 480

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/527,500

DATE: 03/25/2005
TIME: 11:11:05

Input Set : A:\66903-02 sequence listing.txt
Output Set: N:\CRF4\03252005\J527500.raw

L:19 M:270 C: Current Application Number differs, Replaced Current Application No
L:19 M:271 C: Current Filing Date differs, Replaced Current Filing Date